Patent claims

1.   Method for controlling the material flow in production or consumable or, respectively, replacement part maintenance of a product (8) comprised of a

5   plurality of individual parts (3, 4), whereby

-      the individual parts (3, 4) are respectively delivered to a goods receipt of a logistic system (2, 5, 7) and a transponder (13, 14) is associated with each individual part (3, 4), in which transponder (13, 14) are stored production and delivery data regarding the individual part (3, 4), which production and delivery

10   data comprise quality data,

-      the data of the transponder (13, 14) are read at the goods receipt and are used for controlling the further material flow such that the individual parts (3, 4) are transported in a controlled manner to predetermined, subsequent process stations and

15   -   a plurality of transponders (13, 14) that are commonly housed in a transport unit is essentially read out simultaneously at the goods receipt with a detection device (24, 40, 54).

2.   Method for controlling the material flow in the production and/or

20   consumable part management and/or replacement part management of a product (8) comprised of a plurality of individual parts (3, 4), in particular according to claim 1, whereby

-      the individual parts (3, 4) are respectively delivered to a goods receipt of a logistic system (2, 5, 6) and a transponder (13, 14) is respectively associated with

25   each individual part (3, 4), in which transponder (13, 14) are stored production and delivery data regarding the individual part (3, 4), which production and delivery data comprise quality data,

-      the data of the transponder (13, 14) are read at the goods receipt and are used for controlling the further material flow such that the individual parts (3, 4)

30   are transported in a controlled manner to predetermined, subsequent process stations and

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- the individual parts (3, 4) are in particular taken in trust by the production site operator and stored in a production site storage (43) until they are required for production and

- whereby the removal of an individual part (2 [sic], 4) from the production site storage (34) or its assembly in an aggregate (36) of the product (8) is detected with a transponder reader (44, 45), and a payment obligation for the production site operator is only triggered upon the removal of the individual part (2 [sic], 4) from the production site storage (34) or upon installation of the individual part (2 [sic], 4) in the aggregate.

3.   Method for controlling a material flow according to claim 1 or 2, whereby

- [sic] for monitoring of the product quality of the product (8), whereby

- further quality data are stored in the transponder (14) at quality check stations for the individual parts (3, 4) and/or for aggregates or aggregate parts that are comprised of a plurality of individual parts.

4.   Method according to any of the claims 1 through 3, whereby at least one group of the individual parts (3) is a mass production article that is delivered at the goods receipt in a quantity of more than five in a container (15), and whereby the container (15) comprises the transponder (14) in which is in particular stored a common quality score regarding the group of mass production articles of the container (15).

5.   Method according to claim 4, whereby information about the quantity of the mass articles located in the container is additionally stored in the transponder (13).

6.   Method according to any of the preceding claims, whereby the reading and/or writing of data at the transponder (13, 14) occurs with a mobile computer (25) that comprises a first interface (25a) for wireless communication with the

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transponder (13, 14) and a second interface (25b) for communication with a computer network (42).

7.   Method according to claim 6, whereby a wireless communication occurs via the computer network interface (25b).

8.   Method according to any of the preceding claims, where
-       an individual part is housed in a package (15) and the transponder (13) is attached on the package (15),
-       the data are read from the transponder (13) and
-       the individual part or individual parts (3) are removed and directly supplied to a further handling, in particular to a production process and/or a storage.

9.   Method according to any of the preceding claims, whereby an aggregate-related transponder (37) is added to an aggregate (36), and data about the aggregate (36) are stored in this transponder (37).

10.   Method according to any of the preceding claims, whereby the input is recorded at the goods receipt by means of the transponder data.

11.   Method according to any of the preceding claims, whereby a plurality of transponder (13, 14) that are commonly housed in a transport unit is essentially read out simultaneously at the goods receipt with a detection device (24, 40, 54).

12.   Method according to any of the preceding claims, whereby the data belonging to an individual part (3, 4) and stored on its associated transponder (13, 14) are stored on a transponder (37) located on a finished, assembled product (8).

13.   Method according to any of the preceding claims, whereby additional data regarding the recycling and/or the disposal are stored in a transponder associated with an individual part, and aggregate part or an aggregate.

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14.   Method according to any of the preceding claims, whereby the data are recorded, stored and/or generated in a computer program and the material flow and/or production process are controlled by a computer.

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15.   Method for handling of a good with which a transponder is associated, whereby data about the good and/or the handling of the good are read and/or stored in the transponder.

10   16.   Method according to claim 15, whereby the data about the handling comprise delivery data.

17.   Method for controlling a process, whereby data are stored in a transponder and/or read from a transponder.

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18.   Method according to any of the preceding claims, whereby delivery data that corresponding to the data stored in the transponder (13, 14) are transmitted from a computer (10) of a supplier production site (1) to a computer (21) of the logistic system (2) via a remote data connection (20).

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19.   Device for implementation of a method according to any of the preceding claims.

20.   Computer system comprising means for implementation of a method
25   according to any of the claims 1 through 18.

21.   Computer program product that effects a method workflow according to any of the claims 1 through 18 given installation and execution on a computer.

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